

LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A device for examining chemical ~~and/or~~ biological samples, comprising:

a sample carrier for receiving the samples,

an objective for observing the samples through a sample carrier wall, wherein a gap is defined between an outer surface of the sample carrier wall and an exit lens of the objective,

a film of an immersion medium to be provided in the gap such that the film is in contact with both the outer surface of the sample carrier wall and the exit lens of the objective, and

a protection means surrounding the exit lens for preventing the objective from becoming fouled by the immersion medium, wherein the protection means is connected with a suction means for discharging the immersion medium,

wherein the protection means comprises a plurality of capillary channels connected with the suction means for discharging the immersion medium, the plurality of capillary channels each having an inlet opening that is arranged annularly around the exit lens.

2. (Currently amended) ~~The device according to claim 1,~~ A device for examining chemical or biological samples, comprising:
a sample carrier for receiving the samples,
an objective for observing the samples through a sample carrier wall, wherein a gap is defined between an outer surface of the sample carrier wall and an exit lens of the objective,
a film of an immersion medium to be provided in the gap such that the film is in contact with both the outer surface of the sample carrier wall and the exit lens of the objective, and
a protection means surrounding the exit lens for preventing the objective from becoming fouled by the immersion medium, wherein the protection means is connected with a suction means for discharging the immersion medium,
wherein the protection means comprises a capillary channel connected with the suction means for discharging the immersion medium, and
wherein the capillary channel is essentially configured as an annular gap around the exit lens.

3. (Previously presented) The device according to claim 1, wherein the protection means comprises at least two collar portions arranged around the objective and defining the capillary channel.

4. (Currently amended) The device according to one of claim 1, wherein the protection means comprises an overflow reservoir for additionally receiving the immersion medium.

5. (Currently amended) The device according to claim 4, wherein the overflow reservoir comprises a reservoir bottom having a reservoir bottom opening via which the capillary channel is connected with the overflow reservoir.

6. (Currently amended) The device according to claim 1, ~~wherein further comprising a supply means comprising~~ having a supply line, ~~wherein with an outlet opening of the supply line , wherein the outlet opening is~~ arranged that near the exit lens of the objective so that the immersion medium is supplied into the gap at least partly with the aid of capillary forces.

7. (Currently amended) The device according to claim 1, wherein the capillary channel is connected with a supply means for supplying the immersion medium, and the capillary channel comprises a capillary channel opening ~~which that~~ is arranged that near the exit lens so that the immersion medium is supplied into the gap at least partly with the aid of capillary forces.

8. (Currently amended) The device according to claim 7, wherein the capillary channel is connected with a valve, ~~in particular a 3/2-way valve,~~ wherein the valve is connected with the suction means and with the supply means.

9. (Currently amended) A method for examining chemical ~~and/or~~ biological samples, wherein an exit lens of an objective is arranged opposite a sample carrier for observing the sample through a sample carrier wall, wherein between an outer surface of the sample carrier wall and the exit lens of the objective a gap is defined such that in the gap a film of an immersion medium is arranged ~~which that~~ is in contact with both the outer surface of the sample carrier wall and the exit lens of the objective,
wherein via a capillary channel defined in the protection means surrounding the objective as an annular gap around the exit lens the immersion medium is discharged automatically, at least with the aid of capillary forces.

10. (Previously presented) The method according to claim 9, wherein the immersion medium is supplied automatically, at least partly with the aid of capillary forces.

11. (Previously presented) The method according to claim 10, wherein the discharge of the immersion medium is adjusted relative to the supply such that the volume of the film of immersion medium essentially remains constant.

12. (Currently amended) An objective cap for protecting an objective from becoming fouled by an immersion medium, comprising:

an inner collar portion adapted to be placed onto the objective,

an outer collar portion arranged around the inner collar portion, wherein the inner collar portion and the outer collar portion are at least partly spaced relative to each other such that an essentially annular capillary channel is defined, and

an outlet opening provided in the outer collar portion, via which an opening of the capillary channel is connected with a suction means.

13. (Previously presented) The objective cap according to claim 12, wherein an overflow reservoir arranged in the outer collar portion for receiving the immersion medium, wherein the overflow reservoir comprises a reservoir bottom having a reservoir bottom opening via which the capillary channel is connected with the overflow reservoir for discharging immersion medium.

14. (New) The objective cap according to claim 12, wherein the inner collar portion and the outer collar portion are at least partly spaced relative to each other such that a plurality of capillary channels are defined, the plurality of capillary channels each having an inlet opening that is arranged annularly around the exit lens.